

Title (en)  
Audio signal processing apparatus , and audio signal processing method

Title (de)  
Audiosignalverarbeitungsvorrichtung und Audiosignalverarbeitungsverfahren

Title (fr)  
Appareil de traitement de signal audio et procédé de traitement de signal audio

Publication  
**EP 1786240 A2 20070516 (EN)**

Application  
**EP 06255758 A 20061109**

Priority  
JP 2005327237 A 20051111

Abstract (en)  
An audio signal processing apparatus includes: a dividing section (11L,11R) dividing each of audio signals of a plurality of channels (Lch, Rch) into a plurality of frequency bands (sub1-L, . . . , subn-L, sub1R, . . . , subnR); a phase difference calculating section (22) calculating a phase difference (, 1r ) between the audio signals of the plurality of channels, for each of the plurality of frequency bands divided by the dividing section; a level ratio calculating section (23) calculating a level ratio (mag 1r ) between the audio signals of the plurality of channels, for each of the plurality of frequency bands divided by the dividing section; and an audio signal processing section performing output gain setting (13-1, . . . , 13-n, 24) with respect to divided signals obtained by the dividing section, on the basis of the phase difference and the level ratio for each of the plurality of frequency bands calculated by the phase difference calculating section and the level ratio calculating section.

IPC 8 full level  
**H04S 7/00** (2006.01); **G10L 21/028** (2013.01); **G10L 21/0308** (2013.01)

CPC (source: EP KR US)  
**H04S 7/30** (2013.01 - EP KR US); **H04S 7/40** (2013.01 - EP KR US); **H04S 2400/13** (2013.01 - EP KR US)

Citation (applicant)  
• JP 2005327237 A 20051124 - OMRON TATEISI ELECTRONICS CO  
• JP H04296200 A 19921020 - MAZDA MOTOR

Cited by  
EP2355554A3; EP2355555A3; EP2485218A3; EP2680615A1; US8264981B2; EP3643083A4; WO2009027886A3; US9002035B2; US9332211B2; US11457326B2; US11962992B2; WO2022073775A1

Designated contracting state (EPC)  
DE GB

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 1786240 A2 20070516**; **EP 1786240 A3 20100922**; **EP 1786240 B1 20140122**; CN 1964582 A 20070516; CN 1964582 B 20120620; EP 2635050 A1 20130904; JP 2007135046 A 20070531; JP 4637725 B2 20110223; KR 20070050838 A 20070516; US 2007110258 A1 20070517; US 8311238 B2 20121113

DOCDB simple family (application)  
**EP 06255758 A 20061109**; CN 200610146478 A 20061113; EP 13170143 A 20061109; JP 2005327237 A 20051111; KR 20060110845 A 20061110; US 59430006 A 20061108